

Non-surgical Removal of Ureteral Stones.—There has been much written of late years concerning the removal of ureteral stones by non-operative methods and many different technics have been advocated. In a series of 23 cases which were treated by MENNITT (*Southern Med. Jour.*, 1919, xii, 143) the stone was passed in 21 cases after the use of the following procedure. The cystoscope is introduced and the ureter below the stone is dilated with ureteral dilators. After the introduction of 2 to 4 c.c. of a 2 per cent. solution of papaverin or novocain through a ureteral catheter, the catheter is withdrawn so that the ureteral walls may be infiltrated thoroughly. If a small ureteral orifice obstructs, then use ureteral scissors to cut the meatus to the desired size. After this, pass a stiff catheter to or beyond the stone and inject from 2 to 4 c.c. of sterile olive oil. This is followed by the injection of a few drops of a 10 per cent. argyrol solution for its antiseptic value, and it also possibly reduces the soreness from manipulation. The patient, if not in pain, may sit up, but if in pain, large doses of morphin, hot applications and an abundant intake of fluids are indicated. This procedure is employed at intervals of three days if the condition of the patient will permit, the average number of treatments required being three.

Effect of X-rays on Carcinoma in Vitro.—Some experimental work with mouse tumors has been performed by KIMURA (*Jour. Cancer Research*, 1919, iv, 95) to determine the effects of roentgen-ray irradiation on living carcinoma and sarcoma cells in tissue cultures *in vitro*. In the course of the research, it was found that mouse carcinoma and sarcoma grow as well in guinea-pig plasma to which has been added mouse serum diluted with Ringer's solution as in mouse plasma itself, and the outspreading growth of cells in culture, both sarcoma and carcinoma, was not stopped by roentgen-ray action varying from E 4 to E 12. The mitotic figures of cells were limited to a minimum after an exposure of E 8; after exposure to E 12, however, they disappeared entirely and the treated tissue produced no tumor when inoculated into mice. The growing power of sarcoma after E 4 exposure was stimulated to some extent, while carcinoma was not appreciably influenced. After an exposure of tissues to E 12, both sarcoma and carcinoma, the growing power of these tissues was stopped when inoculated into mice, and eliminated the process of mitotic division of cells. The process of oxidation of tissues, both sarcoma and carcinoma, was stimulated by the roentgen-ray action of E 4 and retarded by exposure to E 12 of the ray. The terms E 4, E 8, E 12 indicate that the Hampson's pastille used showed No. 8 or No. 12 tint, that is, equivalent to a dose $\frac{1}{4}$, $\frac{1}{2}$, or $\frac{2}{3}$ of Sabouraud's B tint.

Primary Chorionepithelioma of the Ovary.—Primary chorionepithelioma of the ovary is rare, indeed some authorities consider the ovary to be by far the most unusual site for the extra-uterine development of this form of malignant tumor, so that a case of this kind, which has been reported by KYNOCH (*Edinburgh Med. Jour.*, 1919, xvii, 226) may be of passing interest. The history of the case is that of a nullipara, aged twenty-four years, who complained chiefly of severe pain in the left iliac region, with irregular vaginal hemorrhagic discharge of six weeks' duration. The menstrual history was negative until fourteen

weeks before the patient was admitted to the hospital, when there was eight weeks amenorrhea, followed by the hemorrhagic discharge just mentioned. On examination, the uterus was found slightly enlarged, and in the left fornix there was felt a round tender swelling about the size of a hen's egg, corresponding in position to the left ovary. Laparotomy was performed and the left ovary was found enlarged, nodular on the surface and of a dark purple appearance. It was of such soft consistence that it ruptured and bled freely during the manipulation necessary for its removal, bringing to mind the possibility of an ovarian pregnancy. The convalescence was uneventful, the patient leaving the hospital three weeks after operation, but one month later she was readmitted complaining of a swelling at the seat of the abdominal incision, which was about the size of a billiard ball, firm and tender and which was regarded as a hematoma. It increased rapidly in size, however, and an incision was made into it and it was found to consist of a liver-like substance. Examination per rectum now revealed a soft doughy tumor bulging into the lumen of the bowel. The patient became progressively weaker and died three weeks later. At autopsy, the pelvis was found filled with recurrent chorionepithelioma and metastases were found in the lungs and liver.

PATHOLOGY AND BACTERIOLOGY

UNDER THE CHARGE OF

OSKAR KLOTZ, M.D., C.M.,

PROFESSOR OF PATHOLOGY AND BACTERIOLOGY, UNIVERSITY OF PITTSBURGH,
PITTSBURGH, PA.

Results of Prophylactic Vaccination against Pneumonia.—CECIL and AUSTIN (*Jour. Exper. Med.*, 1918, xxviii, 19) reported successful results with prophylactic vaccination against pneumococci of types I, II and III. They vaccinated 12,519 men at Camp Upton, using a saline suspension of dead pneumococci of these three types. The vaccination against type IV was thought impractical. But one case of pneumonia of the types contained in the vaccine occurred during about ten weeks' observation. This case, type I, developed twenty-four hours after the first inoculation, before immunity could have been produced. Nine cases due to type IV pneumococci and seven due to streptococci occurred during the same period. The type IV cases ran a very mild course. 19,481 unvaccinated troops were used for controls. Among these there occurred during the ten weeks' observation 26 cases of pneumonia, due to pneumococci of types I, II and III; 34 cases due to type IV and 106 due to streptococci. They suggested that cross-protection may explain the small number of type IV cases among the vaccinated troops. No explanation is offered to show why the vaccinated troops were spared in the streptococcus-pneumonia epidemic which must have occurred. These results and those previously reported by Lister working in South Africa are very convincing that protection